

LISTING OF THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A measuring system (1) for picking up structure-borne sound from machine elements in a machine housings, housing wherein the machine housing has a lubrication hole opening; the measuring system comprising:

a mounting pin to be (1) being fixed to the machine housing (15) via the lubrication hole opening (16) and comprising the elements

[[-]]] [[a]] the mounting pin (2) with having a passage hole (3) therethrough along a length of the pin for passage of lubricant through the pin into the lubrication hole opening.

[[-]]] a housing (5, 5a) to accommodate the a printed circuit board therein; the mounting pin passing from the housing into the lubrication hole opening for mounting the vibration sensor housing to the machine housing,

[[-]]] at least one printed circuit board (9) having electronic components for signal evaluation and disposed in the housing,

[[-]]] a vibration sensor housing, at least one vibration sensor (7a), characterized in that the in the vibration sensor housing (7) having the vibration sensor (7a) is arranged such that it the sensor housing can be rotated with respect to the mounting pin (2) as the mounting pin (6) is screwed into the lubrication hole opening (16), and in that, the mounting pin being such that in the end position of the screwing-in of the mounting pin (2), the vibration sensor housing (7) is connected to the machine housing (15) via the a metal bushing (6) with a force fit and so the vibration sensor housing is thereby as to be secured against rotation and the vibration sensor (7a) rests on is adjacent to the metal bushing (6), and thus whereby the structure-borne sound is transmitted directly from the machine housing (15) to the vibration sensor (7a) via the metal bushing (6).

2. (Currently Amended) The measuring system as claimed in claim 1, characterized in that further comprising a temperature sensor for registering the temperature of the machine housing is registered via a temperature sensor (10).

3. (Currently Amended) The measuring system as claimed in claim 1, characterized in that wherein the housing has a lower portion and the metal bushing (6) is connected to the lower half (5) portion of the vibration sensor housing so as to be secure the vibration sensor against rotation with respect to the mounting pin.

4. (Currently Amended) The measuring system as claimed in claim 3, characterized in that, as wherein the vibration sensor housing and the mounting pin are so configured that as the mounting pin (6) is screwed into the lubrication hole opening (16), the housing (5, 5a) is arranged such that it can may be rotated with respect to the mounting pin (2), and in that, in the end position of the screwing-in of the mounting pin (2), the vibration sensor housing (5, 5a) is connected to the machine housing (15) via the metal bushing (6) with a force fit and so as to be secured to secure the vibration sensor housing against rotation.

5. (Currently Amended) The measuring system as claimed in claim 1, characterized in that further comprising damping elements (13, 13a) (e.g. O-rings) are arranged between the printed circuit board (9) and the mounting pin (2).

6. (Currently Amended) The measuring system as claimed in claim 1, characterized in that the machine condition is indicated by further comprising at least one light-emitting diode (14), which is arranged on the printed circuit board (9) for indicating machine condition of the machine.

7. (New) The measuring system as claimed in claim 1, wherein the bushing is of metal.

8. (New) The measuring system as claimed in claim 1, wherein the vibration sensor rests on the bushing.